# CLASS III INVENTORY/PHASE I ARCHAEOLOGICAL SURVEY OF THE SANTA SUSANA FIELD LABORATORY AREA 4, VENTURA COUNTY, CALIFORNIA

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The following paragraphs are taken from the report, *Class III Inventory/Phase I Archaeological Survey of the Santa Susana Field Laboratory Area 4, Ventura County, California*" (W&S Consultants 2001). These selected excerpts present information from the report that has been edited to remove locational references or descriptions that could lead someone to the four sites identified by the investigators.

The cultural resource study was conducted in 2001 in advance of the Environmental Assessment being prepared by DOE for the final closure of Area IV. The initial determination of eligibility for inclusion to the National Registry of Historic Places made by the report's authors was based on criteria available at that time. As part of the process of preparing the EIS for Area IV, DOE will re-evaluate the recommendations and make a second assessment of each site's eligibility.

**Management Summary**

A Class III Inventory/Phase I archaeological survey was conducted for Area 4 of the Santa Susana Field Laboratory (SSFL), eastern Ventura County, California. The study area is a 290-acre parcel that has been used for aerospace and nuclear research and testing since 1947. The investigation involved an archival records search, a review of existing published and unpublished references on local prehistory and history, and an on-foot, intensive survey of the subject property. No sites had been recorded within the study area, but the study area had never been systematically surveyed by archaeologists. On-foot survey resulted in the identification of four archaeological sites. Site SSFL-l is a small rockshelter containing a single pink painting of a burro, of unknown cultural origin and age. SSFL-2 is a small rockshelter that contained two pieces of lithic debitage and a fire-blackened ceiling. SSFL-3 is a single bedrock mortar. SSFL-4 is a small rockshelter that once contained a midden deposit; an estimated 75% of this deposit has been destroyed by artifact looting and thus the site now lacks integrity. Due to their failure to satisfy the criteria of inclusion, these four sites have been determined not eligible to the National Register of Historic Places. Based on this determination, the proposed closure and remediation program is determined to have no effect.

**SSFL-l:** This site is a small cave. The cave measures a maximum of approximately six meters wide by 4.5 meters deep by 1.7 meters in height. It consists of two distinct "alcoves," the southern of which is by far the larger and deeper. The cave opens to the east, with the opening facing a small naturally enclosed area, fanned by surrounding sandstone outcrops.

Archaeological remains at this cave consist of one pictograph and other traces of fugitive pigment. The pictograph is a relatively large (circa 35 by 20 cm), purplish-pink portrayal of a burro. It is shown in profile with the proportionally larger head and shorter legs of the donkey, as opposed to a horse. Minor "runs" of pigment along the stomach line indicate that the motif was drawn with wet paint, rather than having been dry applied.

This motif is located at the far (western) end of the southern alcove, on a back wall under a low ceiling. A near vertical rock panel that is at eye level as one enters this alcove also has remnants of this same paint. Although it is impossible to determine the intended form of this motif (graffiti has obscured much of it), it is clear that it was painted with the same pigment as the burro, and that this was also wet applied. We could find no additional evidence of painting in the cave.

Aside from the intact motif and pigment traces that we noted, no other archaeological remains of any kind were observed at the cave. It lacks aboriginal artifacts, midden deposit, or even substantial fire-blackening on the ceiling, any of which might signal aboriginal use. Likewise, the apron and immediately surrounding area lacked any evidence of aboriginal or historical use.

Although some engraved graffiti is present at the site, the primary painted motif is intact. Given the location of this site within an enclosed area of sandstone outcrops, no other impacts due to development or use of the SSFL have occurred to the cave or its immediate surroundings.

**SSFL-2:** This site consists of a small cave/rockshelter whose walls are heavily fire-blackened (suggesting that fires were built within the overhang). In addition, two pieces of quartzite lithic debitage (primary flakes) were noted on the ground surface. The cave itself is high, with the ceiling estimated to be about 3 meters above modern ground surface. It is six meters wide at the dripline and three meters deep. A small, high alcove is also located at the back of the cave. This is too small for most types of human use, and currently contains a packrat nest. Often, however, these nests contain remnants of perishables (such as baskets) stored in caves prehistorically. The cave opens to the south and is fronted by a pile of large boulders, thereby placing it within a rocky area somewhat removed from development.

Site SSFL-2 appears to have served as a small prehistoric, ephemerally used specialized activity area. No midden deposit was noted and there is no evidence to suggest that it was intensively or regularly used. In part, this may reflect its distance from any natural water source.

**SSFL-3:** This is a single bedrock mortar (BRM) location. The BRM is shallow (<5 cm deep). While it provides a clear indication of prehistoric plant --probably acorn --processing at this location, the small size and singular nature of this mortar suggest that this was a casually rather than intensively used location.

The BRM is located on a large (~1x2x3 m), open boulder sitting in front of a shallow overhang/sandstone cliff face. When surveyed, the area in and surrounding the overhang were covered with vegetation, and ground surface visibility was difficult. While it is possible that additional archaeological remains are present at this location, given the ground surface cover, none could be located despite intensive examination.

SSFL-3 is intact. Again, it is located in a rocky area of sandstone outcrops and thus away from the areas of previous development and use.

**SSEL-4:** The last site discovered within Area 4 is a long but low rockshelter. The rockshelter is within an area of sandstone outcrops. The shelter opens to the NE, and measures seven meters wide by 4.5 meters deep by 1.5 meters high. The midden and the apron in front of it (covering a circumference of roughly 20 meters) contain a dark, organically enriched midden soil. We observed five manos/mano fragments within and immediately in front of the shelter, lithic debitage and calcined animal bone. In addition, at least one very deep bedrock mortar is present on exposed bedrock, at ground surface, in front of the shelter. Additional BRMs and other artifacts may be present in or adjacent to the shelter. When examined during the current study, however, much of the front and opening of the shelter were covered by a dense stand of poison oak, making our investigation of it somewhat cursory.

This site, like the others found within Area 4, is located within a rocky series of bedrock outcrops. This site was found to be heavily disturbed through looting. Roughly 75% or more of the midden deposit within the shelter has been removed, down to bedrock. An old floor heater duct register, apparently used as a kind of artifact sieve, has been left behind in the shelter, providing evidence that the deposit was crudely screened when looted. The remnants of the midden deposit and depth of bedrock indicate that approximately 35-40 cm of archaeological deposit were once present within the shelter.

The backdirt from this looting has been spread over the ground surface in front of the overhang. It may cover intact archaeological deposit at the dripline and apron or, alternatively, it may be covering bedrock at ground surface, including the possibility of additional BRMs. Regardless, the integrity of SSFL-4 has been seriously compromised by this looting, which, most likely, occurred during the height of activities at the SSFL during the late 1950s and 1960s.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Summary

An intensive Class III Inventory I archaeological survey was conducted for the Santa Susana Field Laboratory Area 4 study area, Ventura County, California. This involved background studies reviewing the prehistory, ethnography and historical land-use of the study area; an archival records search to determine whether any prehistoric or historical archaeological sites had been recorded or were known to exist on this property; and an intensive on-foot survey of the study area.

Background studies failed to demonstrate existing knowledge of any prehistoric or ethnographic occupation or use of the study area, per se, although well-known sites are located elsewhere on the SSFL. The study area, however, had never been systematically surveyed by archaeologists.

Intensive survey of 100% of the 290 acres study area resulted in the identification and recording of four archaeological sites. Each of these is located in rocky, undeveloped areas and is associated with a rockshelter or cave. The nature and status of these sites are as follows:

**SSFL-l** consists of a rock painting of a pink burro on the back wall of a small sandstone cave. Although there are traces of additional fugitive pigment of this same distinct color present on another wall in this cave, no other associated archaeological remains (prehistoric, historical, aboriginal or Euro-American) of any kind are present. The motif is clearly not prehistoric in age and is probably Euro-American as opposed to Native American in origin. Whether this painting is historical, in the sense of being greater than 50 years in age or instead contemporary is unknown although, minimally, evidence suggests that it is 40 or more years old. Its purpose and function are unknown, although it may in some fashion relate to the name Burro Flats. Uncontrollable natural processes of exfoliation are rapidly destroying this painting. Although these processes may take a few hundred years before the motif is entirely destroyed, there is no existing conservation technology that, over the long term, can prevent the destruction of this motif.

**SSFL-2** is another rockshelter exhibiting fire blackened walls and ceilings. Two pieces of lithic debitage were observed on the ground surface of the shelter, although no midden deposit is present. The site appears to represent a small special use area.

**SSFL-3** is a single bedrock mortar, located on an open boulder adjacent to a rockshelter. No additional archaeological remains have been found in association with this plant processing feature.

**SSFL-4** is a low rockshelter that contains a midden deposit and bedrock mortar. We estimate that 75% or more of this deposit has been destroyed by looting. This site probably served as a small habitation locale, of unknown age. Because of the looting, however, the site currently lacks integrity.

**5.2 Determinations of NRHP Eligibility and Effect**

Evaluation of the significance of the cultural resources identified during the Class III inventory, and a determination of the effect of the proposed project on these same resources, are based on an initial determination of eligibility of these resources to the National Register of Historic Places (NRHP). Such a determination is based on the criteria required by and outlined in the National Historic Preservation Act, sec. 101 (a), and Title 36 Code of Federal Regulations Part 60.4, respectively. As so defined, a cultural property is eligible to the NRHP if it:

1. is at least 50 years in age;

2. retains integrity of location, design, setting, materials, feeling and association; *and*

3. also has one or more of the following characteristics:
    a. association with events that have made a significant contribution to the broad patterns of our history; *or*:
    b. association with the lives of persons significant in our past; *or*:
    c. embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant, distinguishable entity whose components may lack individual distinction; *or*:
    d. has yielded, or may be likely to yield, information important to prehistory or history.

The baseline for criterion (3.d) may generally be taken as the utility of a particular site in addressing existing regional research designs and problems, as discussed previously.

The effect of the proposed action on cultural resources is then defined at Title 36 Code of Federal Regulations Part 800.9. An action is said to have an effect on a property when the action may alter the characteristics of a significant property that qualified it for the NRHP. An adverse effect is one that diminishes a significant property's integrity through physical destruction, damage or alteration; or alters or conflicts with the character of the property when such character is contributory to its inclusion in the NRHP. An action has no effect when the criterion of effect is not met.

Site SSFL-I fails to meet the requirements of criterion (3) and it is uncertain whether it meets the age criterion specified in (1). It is therefore determined not eligible to the NRHP.

SSFL-2 consists of a rockshelter and two pieces of lithic debitage. As such, it qualifies as a sparse lithic scatter (ORP 1988). Based on a programmatic agreement between the federal government and the State of California Office of Historic Preservation, sparse lithic scatters are considered categorically not eligible for the NRHP.

SSFL-3 consists of a single bedrock mortar. As a single archaeological feature, it does not meet the criteria of eligibility to the NRHP.

SSFL-4 is a rockshelter that once contained a potentially significant midden deposit Artifact looting sometime in the past, however, has destroyed 75% or more of this deposit. The site currently lacks integrity, based on this fact, and is therefore determined not eligible to the NRHP, due to its failure to satisfy criterion (2).

The potential effect of the proposed project, consisting of the closure of SSFL Area 4 and the remediation of potential environmental hazards contained therein, can then be assessed with reference to two concerns. The first involves the physical actions resulting from the proposed project, and whether such actions have the potential directly or indirectly impact cultural resources of any kind. The location of the four archaeological sites identified during the Class III inventory Phase I survey in each case involves rocky areas. None of these have been developed or used during the life of the Area 4 facility as a result of their physical settings. Because of this fact, none of the four site areas will require specific remediation actions. The proposed project, therefore, will have no effect on cultural resources of any kind within Area 4.

Second, and reflecting specifically the legal concerns outlined above by reference to 36 CFR 800.9, none of the four archaeological sites identified and recorded within the SSFL Area 4 study area have been determined eligible for listing on the NRHP. Based on this fact, the proposed remediation and closure project is determined to have no effect on significant cultural resources.

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